



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/748,088	12/30/2003	Mikko Jaakkola	KOLS.083PA 6864	
	7590 11/19/2007		EXAM	INER
Hollingsworth & Funk, LLC Suite 125			THIER, MICHAEL	
8009 34th Avenue South Minneapolis, MN 55425			ART UNIT	PAPER NUMBER
, , , , , , , , , , , , , , , , , , ,		,	2617	
•			MAIL DATE	DELIVERY MODE
			11/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

, (Application No.	Applicant(s)		
		10/748,088	JAAKKOLA ET AL.		
	Office Action Summary	Examiner	Art Unit		
		Michael T. Thier	2617		
	The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address		
Period fo	• •				
WHIC - Exter after - If NO - Failu Any r	ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DATE of time may be available under the provisions of 37 CFR 1.11 SIX (6) MONTHS from the mailing date of this communication. Period for reply is specified above, the maximum statutory period were to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing and patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE.	\. lely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status					
1)🖂	Responsive to communication(s) filed on <u>03 O</u>	ctober 2007.			
2a) <u></u> □	This action is FINAL . 2b)⊠ This action is non-final.				
3)[Since this application is in condition for allowance except for formal matters, prosecution as to the merits is				
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositi	on of Claims				
4)⊠ 5)□ 6)⊠ 7)□	Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed. Claim(s) 1-28 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or	wn from consideration.			
Applicati	ion Papers				
	The specification is objected to by the Examine				
10)	The drawing(s) filed on is/are: a) acc				
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex				
Priority (under 35 U.S.C. § 119				
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
Attachmen		4) 🔲 Interview Summary	(PTO-413)		
2) Notice 3) Infor	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate		

Art Unit: 2617

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/03/2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

The examiner would like to provide the following responses to some arguments made by the applicant.

The applicant argues that "Kubosawa does not teach applying a handover algorithm when the current state of a user interface component is active, as claimed in each of the independent claims."

In response to applicant's argument, the examiner would like to note that the wording of the claim recites "...wherein a user interface component of the terminal may be set to an active state *or* to an inactive state..." (emphasis added) The examiner interprets this to mean that the user interface can be set to either active or inactive, and thus a user interface that is only inactive can read on this claim (i.e. only one of the

limitations is necessary, either active or inactive since the claim recites the interface may be set to one or the other). The claim is not limited to the user interface component being active as argued by the applicant. In any event the examiner had pointed out hoe the interface can be active or inactive since a user has the ability to input a command. Therefore, if there is a user input the user interface is considered active, and if there is no user input, then the user interface is inactive.

Applicant further argues, "There is no indication that Kubosawa applies a handover algorithm when a user interface component has been checked to be active."

In response to applicant's argument, the examiner respectfully disagrees. As shown in figure 2, steps s9 and s10, the system in Kubosawa checks an instruction of the user (i.e. checks the user interface for an input), and if the user has supplied the proper input to the user interface, then the handover will be executed. This clearly reads on checking the user interface to be active and then applying a handover algorithm.

Applicant further argues, "Kubosawa does not teach that a handover is applied only when a user interface component is active..."

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Kubosawa does not teach that a handover is applied *only when a user interface component is active*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Application/Control Number: 10/748,088

Art Unit: 2617

Applicant further argues that claim 21 was not included in any of the statements of the rejection.

In response to applicants argument, the examiner would like to point to page 2 of the rejection which shows the rejection for claims 1, 9, and 21, where it is clearly visible that 21 is rejected. The examiner may have made a typographical error in leaving it out of the heading at par. 2, and apologizes for this. However, the rejection can be clearly seen under par. 2 and it is clear that the claim should have been included in that statement.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-2, 8-12, 19, 21-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubosawa (US 2002/0183062) in view of Wong et al. (US 7159194).

Regarding claims 1, 9, and 21. Kubosawa teaches a mobile terminal, method, and computer readable medium comprising: (figure 1)

a user interface (figure 1 item 62) and a handover algorithm (par. 11-12, 27, and 31-33), a user interface component of the terminal being adjustable in an inactive state or in an active state, (see figure 2 items S8, S9, and S10, specifically where it judges the instruction of the user and if there is no input it does not handover, and if there is

input at step S9, it executes the handover. The idea of judging the instruction of the user and detecting an input reads on the interface being active and inactive, i.e. no input is inactive, while an input is active.)

wherein the terminal is configured to check the state of the user interface component, (figure 2 item S9) and

if the current state of the user interface component is active, the terminal is configured to apply, on the basis of the checking, the handover algorithm configured to select one of the at least two available channels to be used for a connection from the mobile terminal. (see figure 2 items S9, which then goes to execute the handover based on the instruction of the user, and if no input is made by the user, it does not perform a handover but goes back to step S3, i.e. applying the handover on the basis of the checking, only when the state of the user interface is active.)

Although Kubosawa teaches that the phone is being actively used in the active state of the user interface (i.e. the user is inputting a command, thus the phone is being actively used), he does not specifically disclose that the phone is not being actively used in the inactive state of the user interface. The examiner would like to note that this is an obvious feature in the wireless communications are that would have been obvious to one of ordinary skill in the art at the time of invention. However, for further clarification the following reference to Wong is provided.

Wong teaches an electronic device, such as a mobile terminal (column 2 lines 46-54). He teaches the idea of the user interface of the terminal having an inactive state, and that the inactive state means that the user interface features are not useable.

He further explains that the inactive state may correspond to a low power state, such a as sleep mode, and the device must be actuated to be fully operational. The idea of the device being in a sleep mode clearly means that the phone is not being actively used while the user interface is in the inactive state. (column 3 lines 4-8)

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Wong with the teachings as in Kubosawa.

The motivation for doing so would have been to allow for saving power in the electronic device by utilizing a sleep mode when the user interface is in active.

Regarding claims 2 and 10. Kubosawa further teaches wherein the checking of the state occurs in response to changing the state of the user interface component. (see par. 33, and par. 35 i.e. handover is done by instructing the controller 50 by using input keys 62, also see figure 2 item S9, i.e. judge instruction of user)

Regarding claims 8 and 19. Kubosawa further teaches wherein the handover algorithm determines a change between channels of different network technologies. (par. 37, the handover is performed between different communication systems, and a change in channel would thus be inherent.)

Regarding claims 11 and 12. Kubosawa further teaches wherein the terminal is configured to initiate the handover algorithm in response to the change from the inactive state to the active state. (see par. 33, and par. 35 i.e. handover is done by instructing the controller 50 by using input keys 62, also see figure 2 item S9, i.e. judge instruction of user, therefore when a key is pushed the key is changed from inactive to active, and the handover takes place, thus reading on this limitation.)

Regarding claims 22, 24, and 26. Kubosawa further teaches that checking the state further comprises checking the state of a mechanical user interface component in figure 1 item 62, which are input keys, (i.e. mechanical components).

Regarding claims 23, 25, and 27. Kubosawa further teaches the idea of performing measurements on the current state if the user interface is active. (see figure 2 item S4)

Regarding claim 28. Kubosawa further teaches wherein the apparatus is a mobile terminal with a user interface in figure 1.

5. Claims 3-4, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubosawa (US 2002/0183062) in view of Wong et al. (US 7159194) in further view of UK Patent Application GB 2289191 (hereinafter Motorola).

Regarding claims 3-4 and 13-14. Kubosawa and Wong teach the limitations of the previous claims.

However, they do not distinctly disclose the limitations wherein the checking of the state occurs in response to detecting a new available network resource.

Motorola teaches a method, system, and computer readable medium for determining handover (abstract). He teaches on page 3 lines 1-10, the idea of deciding to perform a handover if the mobile station is near another coverage area (i.e. network resource). He further teaches the decision to handover being based on the need for handover in the same citation (i.e. quality of communications reads on the need for handover, since if the quality drops so low as to not allow communication, handover to another network would be required in order to continue communications.)

Art Unit: 2617

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Motorola, into the teachings of Wong and Kubosawa. The motivation for doing so would have been to allow for determining whether or not to perform handover based on intersystem cell association, and to allow for uninterrupted service provision between different communication systems. (Motorola page 1 lines 23-28 and page 2 lines 5-10)

6. Claims 5, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubosawa (US 2002/0183062) in view of Wong et al. (US 7159194) in further view of Claxton (US 6178388).

Regarding claims 5, 15, and 16. Kubosawa and Wong teach the limitations of the previous claims.

However, they do not distinctly disclose wherein the terminal comprises a body portion and a lid which is connected to the body portion and can be moved with respect to the body portion, and wherein the state of the lid in relation to the body portion is checked.

Claxton teaches the idea that flip phones (phones with 1st and 2nd portions) are well known in the art and that when the flip phone is closed (with key pads covered) they are inactive, and when opened they are active. (column 1 lines 48-59)(i.e. which clearly reads on "wherein the state of the lid in relation to the body portion is checked", and checking the position of the 1st portion in relation to the 2nd).

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Claxton into the teachings of Wong and Kubosawa. The motivation for doing so would have been to allow for the mobile device as in Kubosawa to be of the flip phone type, since it is a well-known and highly popular style mobile phone.

7. Claims 6 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubosawa (US 2002/0183062) in view of Wong et al. (US 7159194) in further view of Cowsky, III et al. (US 2004/0204123).

Regarding claims 6 and 17. Kubosawa and Wong teach the limitations of the previous claims.

However, they do not distinctly disclose wherein the terminal comprises a keypad and a keypad locking functionality for locking the keypad, whereby the state of the keypad locking is checked.

Cowsky teaches a flip phone with keypad in figure 1, he further teaches the idea of a locking functionality for locking the keypad in par. 2 to allow for making the keys inactive.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the locking function as in Cowsky with the teachings of Wong and Kubosawa. The motivation for doing so would have been to allow for locking the keypads and avoiding inadvertent keystrokes (Cowsky par. 1-2)

Art Unit: 2617

8. Claims 7 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubosawa (US 2002/0183062) in view of Wong et al. (US 7159194) in further view of Wren, III (US 2004/0248594).

Regarding claims 7 and 18. Kubosawa and Wong teach the limitations of the previous claims.

However, they do not distinctly disclose wherein the terminal comprises a screen saver functionality, the state of which is detected, whereby the state of the user interface component is inactive when the screen saver functionality is applied and the state of the user interface component is active when the screen saver functionality is not applied.

Wren teaches the idea of having screen savers displayed on mobile phones in par. 55. He further teaches to display the screen saver when the device state is inactive, and not displaying it when the device is active (i.e. detecting the state of the device).

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Wren with the teachings of Wong and Kubosawa. The motivation for doing so would have been to allow for the ever popular idea of personalizing the user device (Wren par. 55)

9. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kubosawa (US 2002/0183062) in view of Wong et al. (US 7159194) in further view of Harris et al. (US 6871074).

Application/Control Number: 10/748,088

Art Unit: 2617

Regarding claim 20. Kubosawa and Wong teach the limitations of the previous claims. He further teaches the idea of the terminal comprising of a timer in figure 2, see item S3.

However they do not distinctly disclose wherein the terminal comprises a timer configured to determine the state of the user interface as inactive after a predetermined time period has elapsed after the latest user activity.

Harris teaches it is well known for a mobile terminal using a timer to transition the mobile to an off/inactive state upon the given time being elapsed (clearly shown in the abstract).

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to utilize the teachings of Harris with the teachings of Wong and Kubosawa. The motivation for doing so would have been to increase system performance (abstract).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael T. Thier whose telephone number is (571) 272-2832. The examiner can normally be reached on Monday thru Friday 7:30-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael T Thier Examiner Art Unit 2617

11/14/2007

DUC M. NGUYEN SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2600